

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in this Application.

1. (Currently Amended) A method for a first user to communicate in an Internet Protocol (IP) centric distributed network with a plurality of service layers providing a plurality of functions associated with each of the service layers, the method comprising:

accessing the network to establish a point of presence through an access interface layer at an access management layer and a core portion of the network and to designate a default amount of bandwidth and a plurality of default setup parameters, wherein the access management layer is access technology independent and the access interface layer is access technology specific;

invoking service through an allied application server on the network to establish an amount of network resources requested by the first user, wherein the allied application server manages any changes requested by the first user to the quality of service parameters and bandwidth amount through the core network; and

establishing a transport session to create and manage a connection from the first user to a destination address; ~~and~~

~~distributing a service session management functions among a plurality of components within the IP centric distributed network.~~

2. (Previously Presented) The method of claim 1 wherein the plurality of service layers includes a network service function layer.

3. (Previously Presented) The method of claim 1 wherein the plurality of service layers includes a local service function layer.

4. (Previously Presented) The method of claim 1 wherein the plurality of service layers includes an access service function layer.
5. (Cancelled)
6. (Previously Presented) The method of claim 4 wherein the access service function layer accommodates a plurality of technologies used for the first user to communicate to the network.
7. (Previously Presented) The method of claim 1 wherein the invoking service through the application server includes providing a list of a plurality of functions available to the first user.
8. (Previously Presented) The method of claim 7 wherein the plurality of functions available to the first user are based on capabilities of the first user and a plurality of network preferences.
9. (Previously Presented) The method of claim 2 wherein the network service layer includes a mobility manager that provides handoff services to the first user when the first user leaves the local service function layer for another local service function layer.
10. (Previously Presented) The method of claim 3 wherein the local service layer includes a mobility manager that provides handoff services to the first user when the first user leaves an access management layer for another access management layer.
11. (Previously Presented) The method of claim 4 wherein the access management layer includes a location tracking server that provides handoff services to the first user when the first user leaves a first cell in a first access interface layer for another cell in another

access interface layer.

12. (Cancelled)

13. (Previously Presented) The method of claim 1 wherein an access and a termination functions at an access management layer reserves any quality of service parameters and an amount of bandwidth requested by the first user.

14. (Previously Presented) The method of claim 1 further including sending communications from an application layer at the first user wherein an user agent client resides at the first user.

15. (Previously presented) The method of claim 1 further including sending communications from a network layer at the first user wherein an user agent client resides at an access management layer of the access layer.

16. (Previously Presented) The method of claim 1 further including an user agent server associated for each of a plurality of access interface layer of the access layer.

17. (Previously Presented) The method of claim 1 further including an user agent server that acts as a gateway by converting incoming protocols of incoming communications to a protocol understood by the first user.

18. (Previously Presented) The method of claim 1 further including an user agent server that delivers incoming protocols of incoming communications to the first user when the incoming protocol is understood by the first user.

19. (Previously Presented) The method of claim 1 wherein the network includes a

connection management server that can transport communications on a plurality of backbone infrastructures.

20. (Previously Presented) The method of claim 1 wherein the network includes a connection management server that can transport communications on a point to point basis.

21. (Previously Presented) The method of claim 1 wherein the network includes a connection management server that can transport communications on a point to multi-point basis.

22. (Previously Presented) The method of claim 1 further including providing the requested amount of network resources by utilizing a connection management server that utilizes a plurality of protocols to deliver a requested quality of service for latency.

23. (Previously Presented) The method of claim 1 further including providing the requested amount of network resources by utilizing a connection management server that utilizes a plurality of protocols to deliver a requested bandwidth.

24. (Previously Presented) The method of claim 1 further including deciding policy parameters at a core network level.

25. (Previously Presented) The method of claim 24 further including enforcing policy parameters at an access management level.

26. (Previously Presented) The method of claim 1 wherein a plurality of access management layer components interact with a network layer of the first user to establish an access session.

27. (Previously Presented) The method of claim 1 wherein a plurality of access management layer components interact with a plurality of components to bring the mobile host on the traffic channel.

28. (Previously Presented) The method of claim 1 wherein a plurality of access management layer components interact through a connection management component to establish point to point protocol path that allows the first user to access any other IP capable device through a serving network.

29. (Previously Presented) The method of claim 1 wherein a plurality of network preferred call/session control services are handled through a plurality of access management components.

30. (Previously Presented) The method of claim 1 wherein handoff, power control, and paging functions related handshakes with the first user are controlled by a plurality of access management components.

31. (Previously Presented) The method of claim 1 wherein the first user interacts with a plurality of allied protocol servers and access management service layer components.

32. (Previously Presented) The method of claim 31 wherein the plurality of protocol servers and access management service layer components interact with a plurality of components at the local service function layer.

33. (Previously Presented) The method of claim 1 wherein a plurality of components at a local service function layer provide specific services to a plurality of access management components during establishment of an access session and service session with the first

user.

34. (Previously Presented) The method of claim 1 wherein the accessing includes providing subscriber management and policy decision services for the first user.

35. (Previously Presented) The method of claim 1 wherein policy decision services are provided for the first user during user session invocation.

36. (Previously Presented) The method of claim 1 wherein Intranet services are provided to the first user by a local service function layer through specialized application servers.

37. (Previously Presented) The method of claim 1 wherein the first user interacts with a plurality of global network service components.

38. (Previously Presented) The method of claim 1 wherein the accessing further includes a network service function layer providing services to a local service function layer.

39. (Previously Presented) The method of claim 1 further including providing subscriber management services during an access session establishment for the first user.

40. (Previously Presented) The method of claim 1 where the first user is capable of accessing publicly available services.

41. (Previously Presented) The method of claim 1 wherein the first is capable of direct home network accesses.

42. (Previously Presented) The method of claim 1 further including enforcing the accounting and billing policies for services and collecting and reporting the charging data to an operator's billing system.

43. (Previously Presented) The method of claim 1 further including accounting clients at the application servers facilitating accounting activities at a service level for the first user.

44. (Previously Presented) The method of claim 1 further including accounting clients at the access management layer facilitating the collection of usage data reported to the accounting server at the core network for accumulation.

45. (Previously Presented) The method of claim 1 further including interfacing with a storage device to fetch collected data in order to create a customer billable record.

46. (Currently Amended) A communications network architecture for an Internet Protocol centric wireless network for a first user to communicate with a destination, the architecture comprising:

a radio access network including:

an access interface layer configured for communication with a mobile device associated with the first user and

an access management layer coupled to the access interface layer and configured to manage communications between the access interface layer and a core network, wherein the access management layer is access technology independent and the access interface layer is access technology specific;

a core network connected to the access management layer, the core network configured to control network resources associated with the mobile device and maintain user and network information associated with the mobile device;

an allied application service platform that forms an intranet network connected to the core network, the allied application service platform configured to access the user and network information maintained by the core network to provide application specific services to an application located on the mobile device, wherein the services are

customized for the user by the allied application service platform based on the user and network information; and

an application service platform within the Internet independent from the core network and connected to the access management layer, the application service platform configured to provide application specific services to an application located on the mobile device without having access to the user and network information maintained by the core network.

47. (Previously Presented) The architecture of claim 46 wherein the application service platform within the intranet is allied with the core network.

48. (Cancelled)

49. (Previously Presented) The architecture of claim 46 wherein the application service platform within the Internet is not allied with the core network.

50. (Previously Presented) The architecture of claim 46 wherein the access management layer receives service requests from the first user.

51. (Previously Presented) The architecture of claim 46 wherein the core network receives service requests from the first user.

52. (Previously Presented) The architecture of claim 46 wherein the intranet network receives service requests from the first user.

53. (Previously Presented) The architecture of claim 46 wherein the intranet network includes a plurality of independent service providers and wherein the plurality of independent service providers are allied with the core network.

54. (Previously Presented) The architecture of claim 46 further including independent service providers outside the core network.

55. (Previously Presented) The architecture of claim 46 wherein the allied application service platform in connection with the core network provides feature analysis.

56. (Previously Presented) The architecture of claim 46 wherein the access management layer provides enforcement of the first user's preferences and capabilities.

57. (Previously Presented) The architecture of claim 46 wherein the core network provides dynamic provisioning of Quality of Service.

58. (Previously Presented) The architecture of claim 46 wherein the core network provides dynamic provisioning of data rates.

59. (Previously Presented) The architecture of claim 46 wherein the access management layer provides enforcing access restriction at the serving network.

60. (Previously Presented) The architecture of claim 46 wherein the core network provides routing functions.

61. (Previously Presented) The architecture of claim 46 wherein the core network provides connection types.

62. (Previously Presented) The architecture of claim 46 wherein the core network provides handling of multi-media sessions and accounting.

63. (Previously Presented) The architecture of claim 46 further including support for multiple xANs where each xAN is associated with a different technology.

64. (Previously Presented) The architecture of claim 46 wherein the access management layer forwards data sent by the first user.

65. (Previously Presented) The architecture of claim 46 wherein the core network provides mobility management for user mobility across a plurality of access networks.

66. (Previously Presented) The architecture of claim 46 wherein the access management layer provides usage collection functions.

67. (Previously Presented) The architecture of claim 46 wherein the core network provides accounting, authentication and authorization functions.

68. (Previously Presented) The architecture of claim 46 wherein the core network routes data to the first user via an IP address that the first user is currently using.

69. (Previously Presented) The architecture of claim 46 wherein the core network supports access to multiple network service layers from the same device.

70. (Previously Presented) The architecture of claim 46 wherein the network service management layer is the home network and “owns” the first user’s subscription and associated profile.

71. (Previously Presented) The architecture of claim 46 wherein the network service

management layer supports a “Unified Directory” for subscriber profiles and policies independent of the access type.

72. (Previously Presented) The architecture of claim 46 wherein the network service management layer provides mobility to subscribers on a large scale.

73. (Previously Presented) The architecture of claim 46 wherein the network service management layer allows the first user to roam in any local service layer.

74. (Previously Presented) The architecture of claim 46 wherein the network service management layer provides routing information to anyone requesting to establish communications with the first user.

75. (Previously Presented) The architecture of claim 46 wherein the network service management layer provides accounting, authentication and authorization functions for the first users.

76-78. (Cancelled)